

Computer System  
82

Figure 1

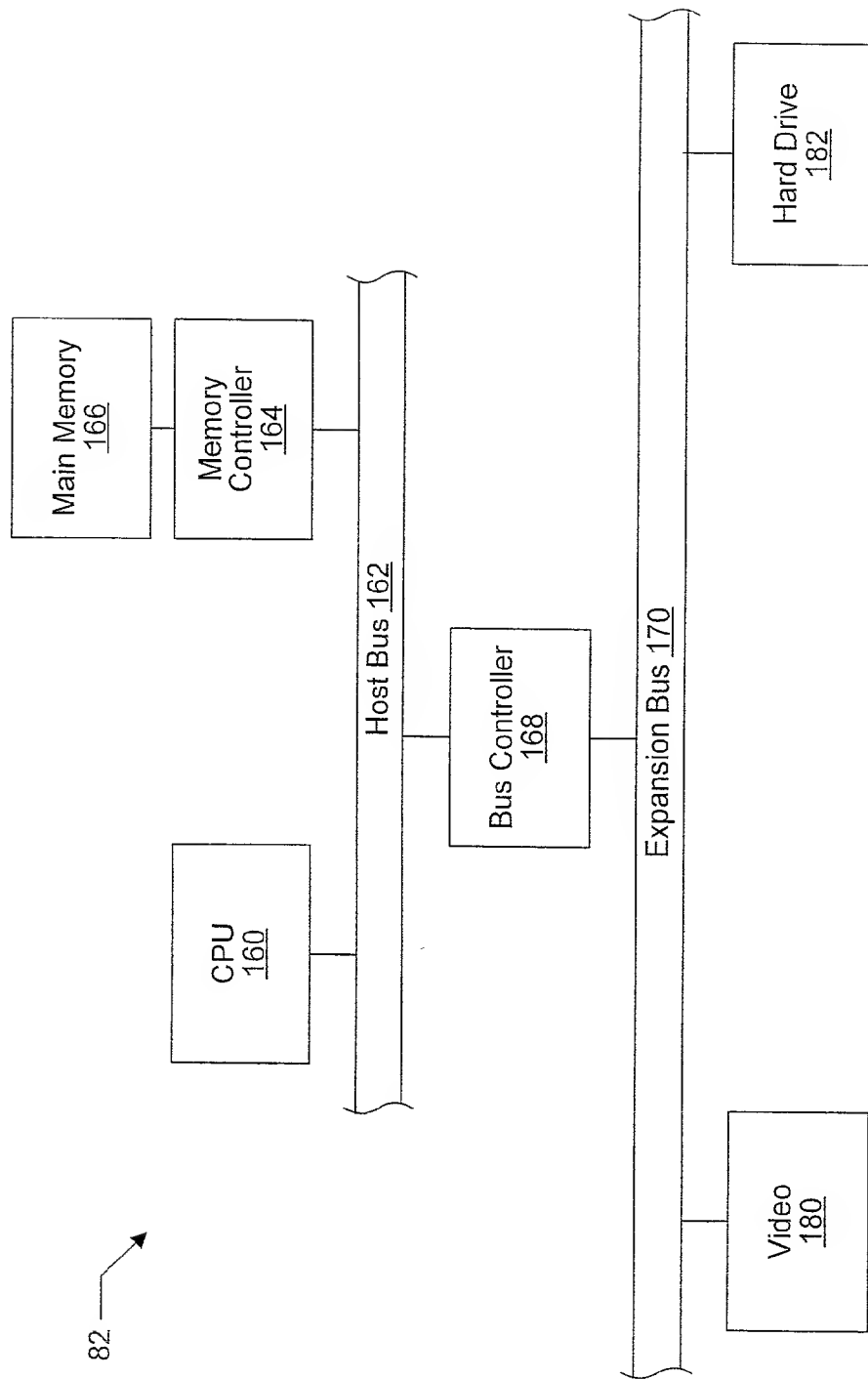


Figure 2

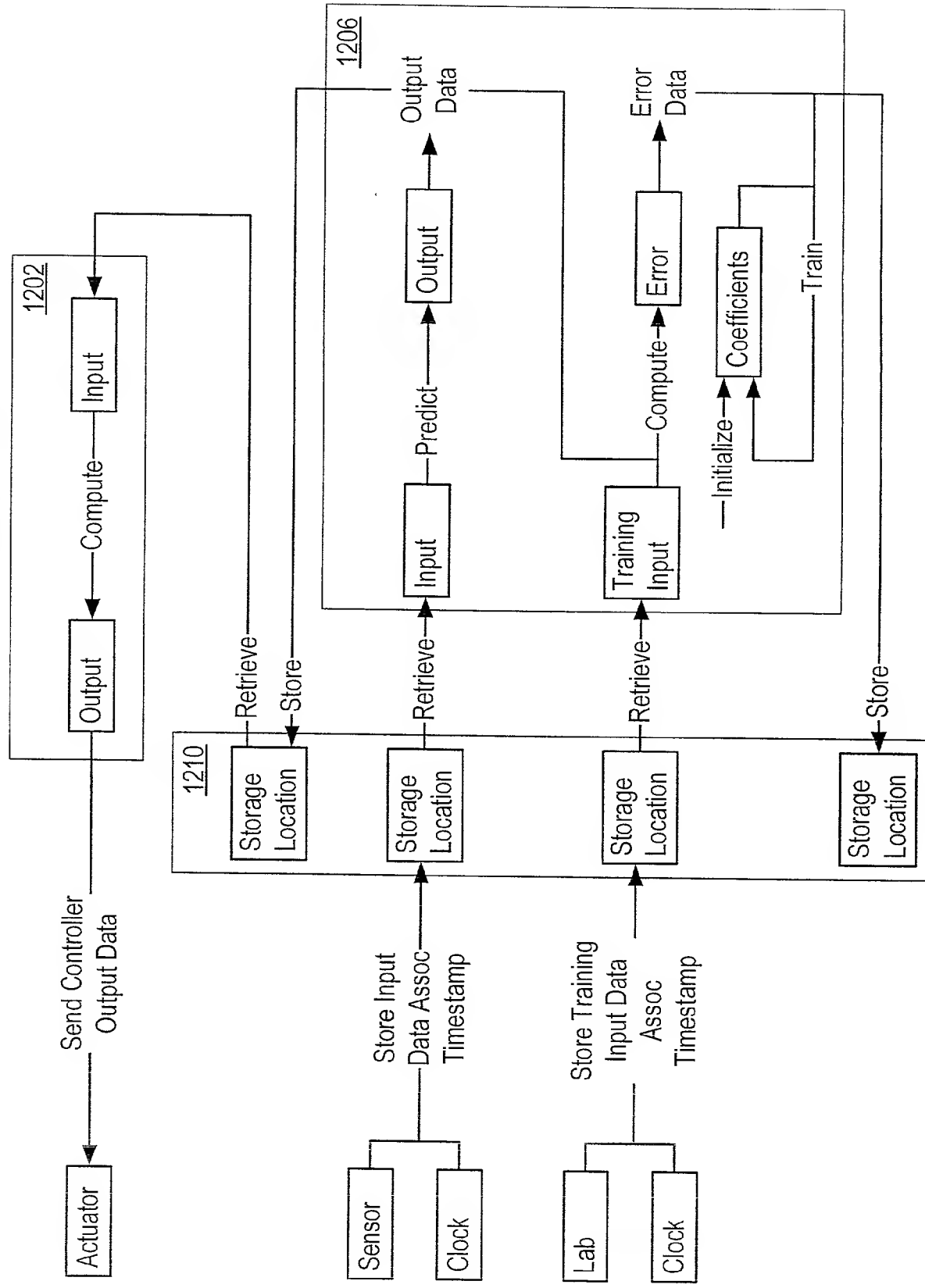


FIG. 3

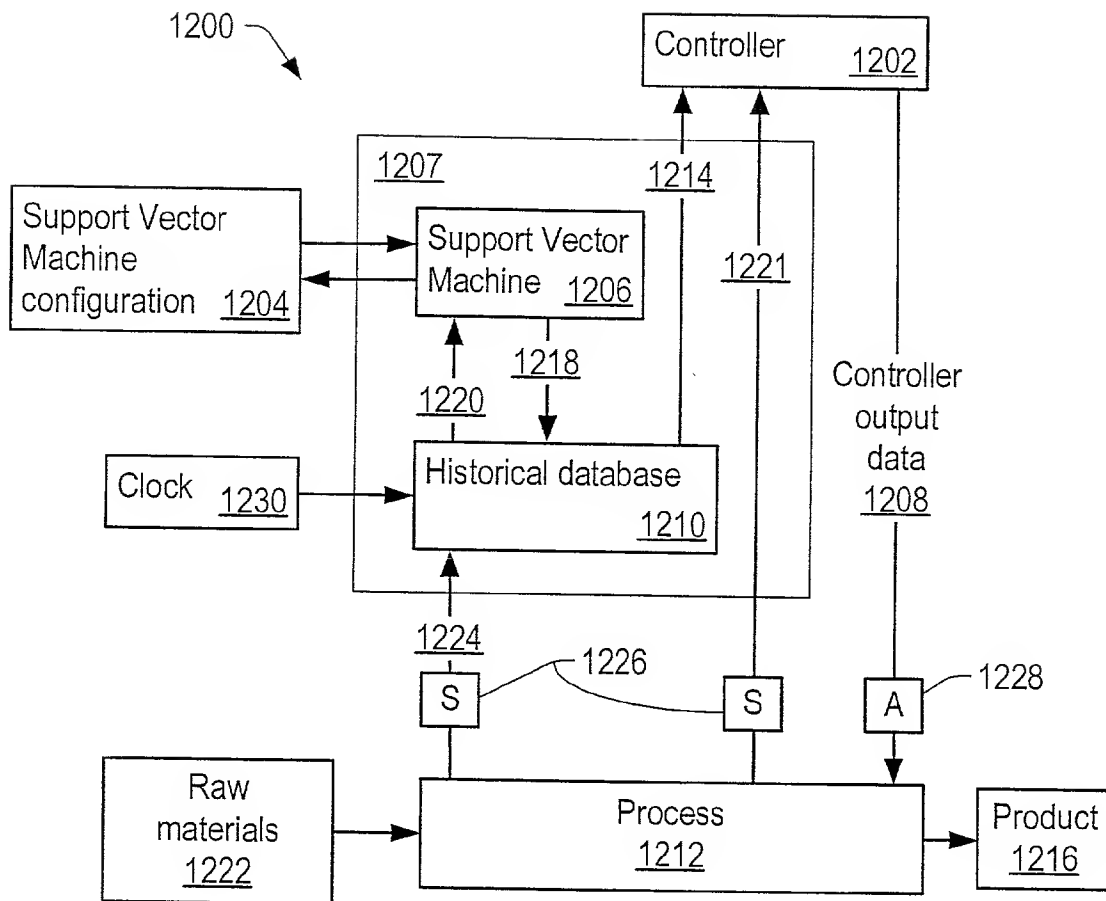


FIG. 4

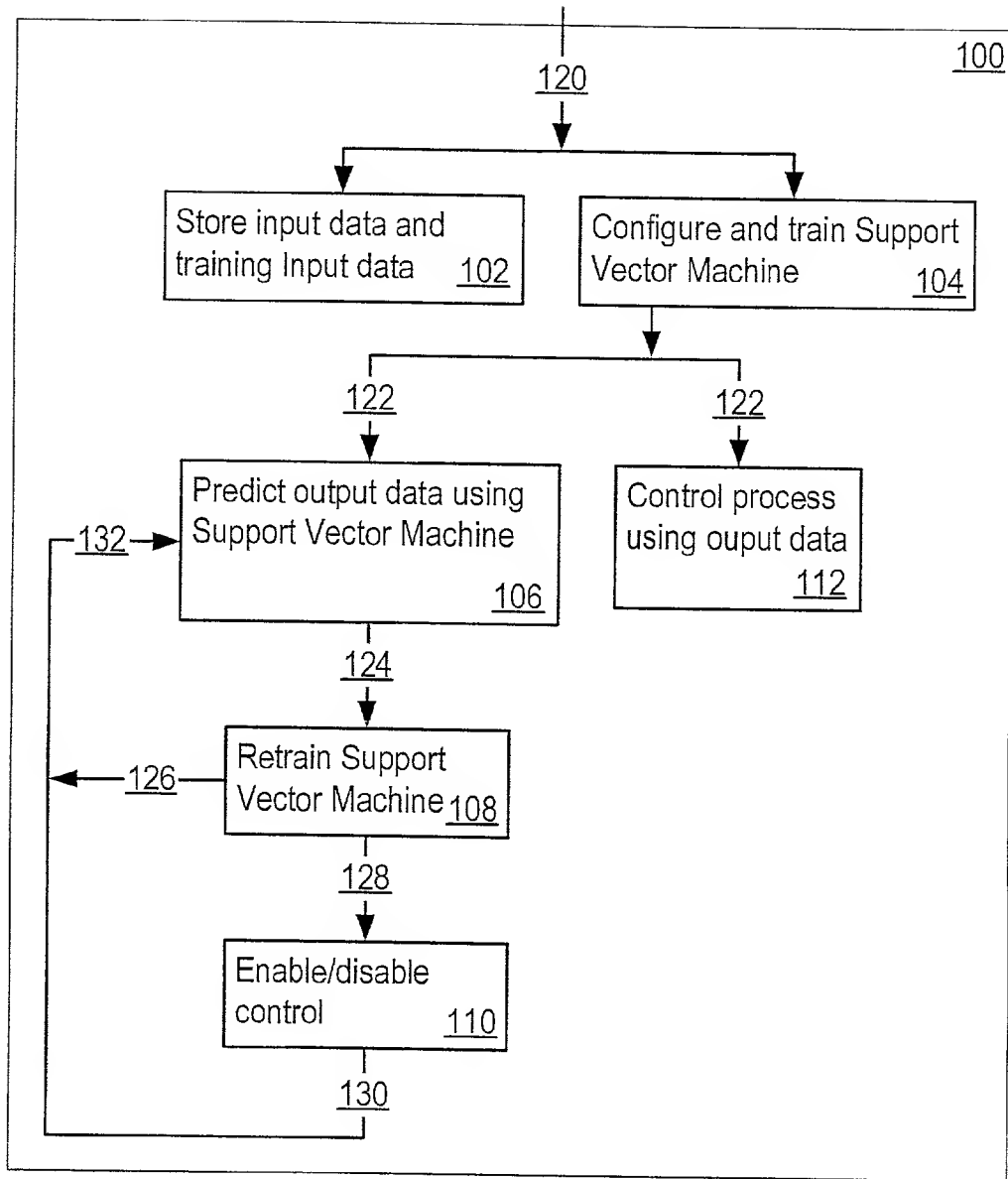


FIG. 5

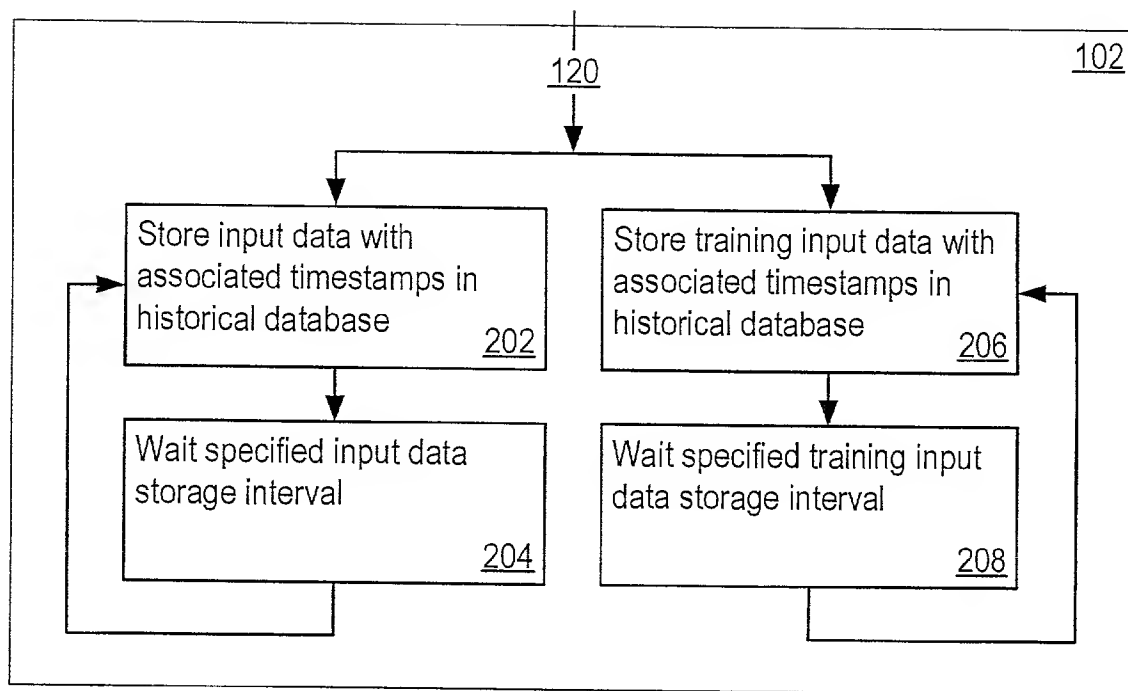


FIG. 6

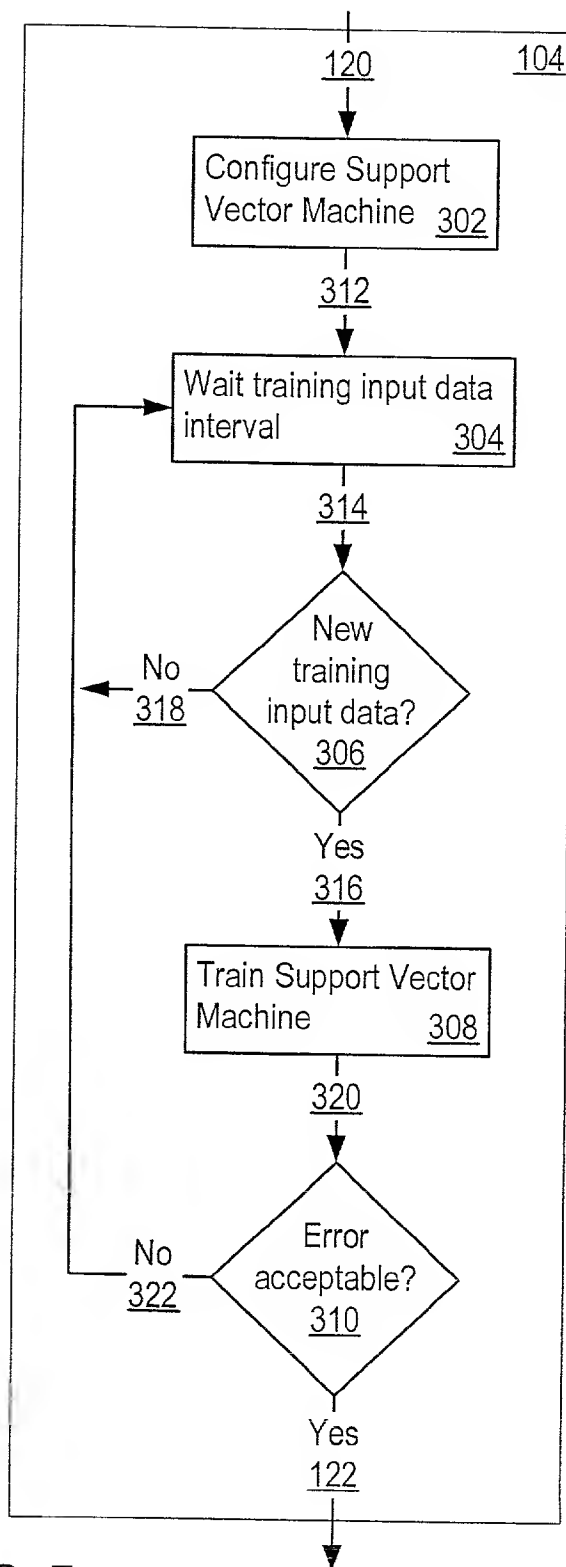


FIG. 7

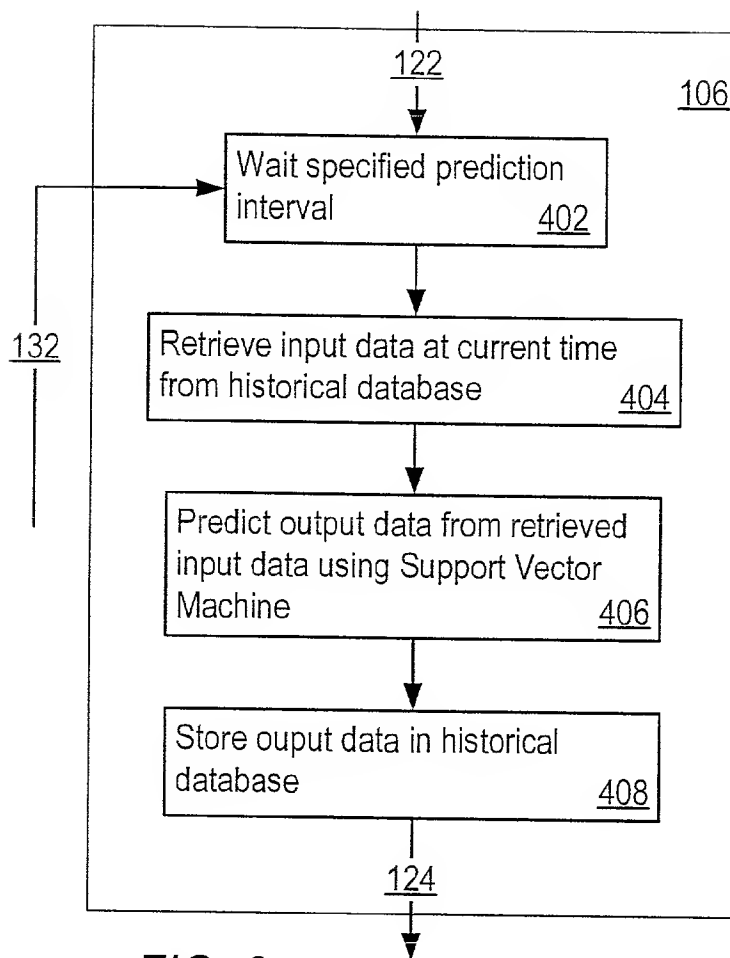


FIG. 8



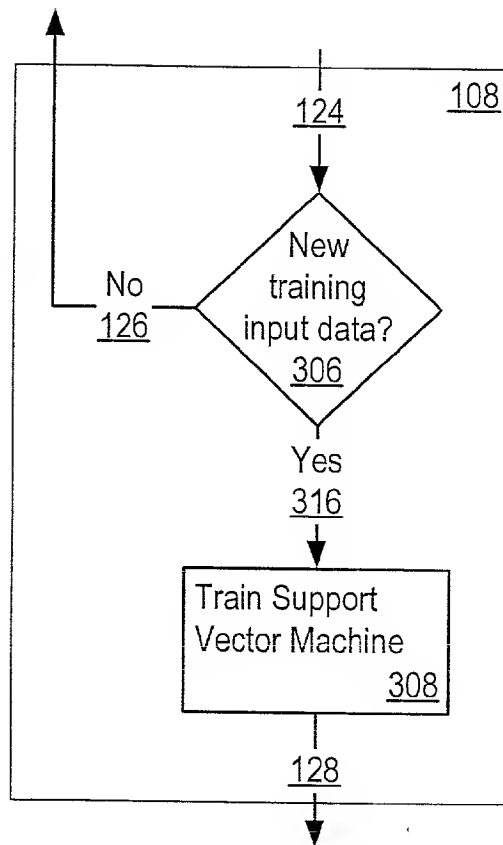


FIG. 9

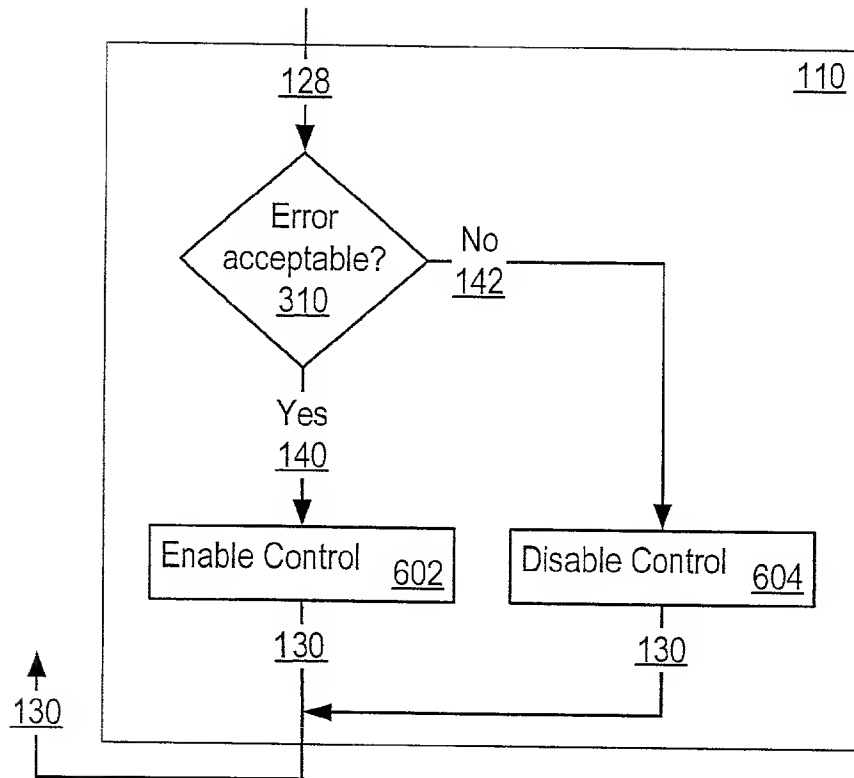


FIG. 10

FIG. 11

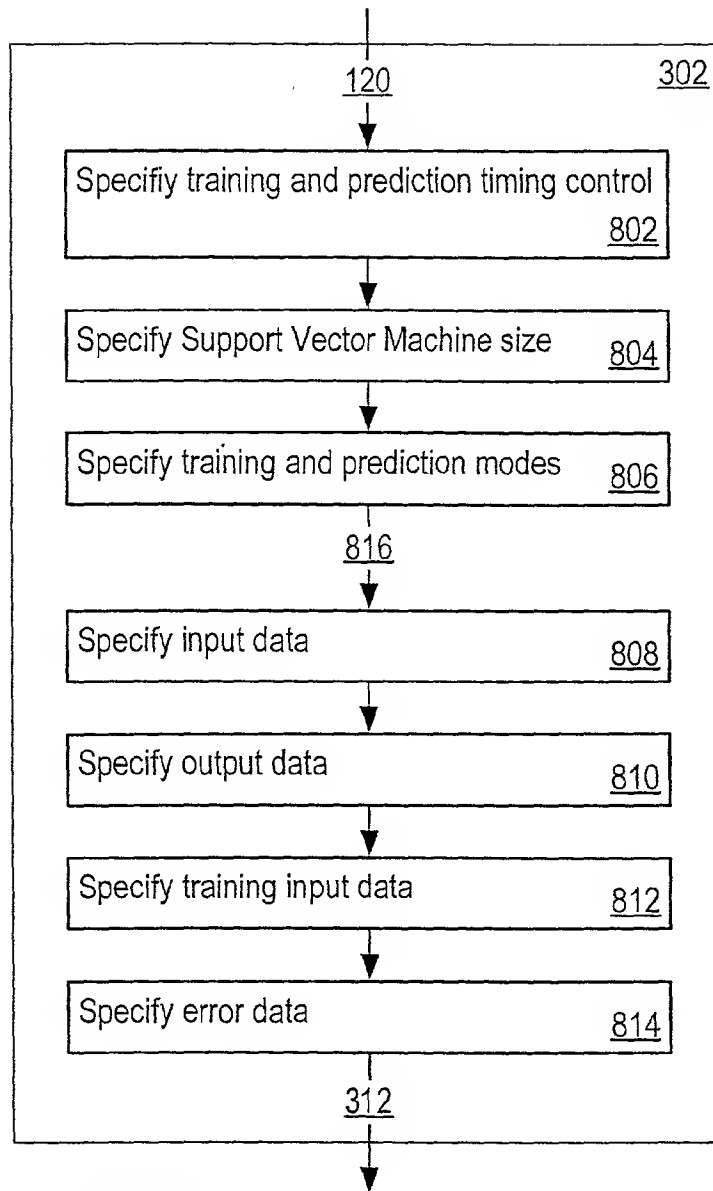


FIG. 12

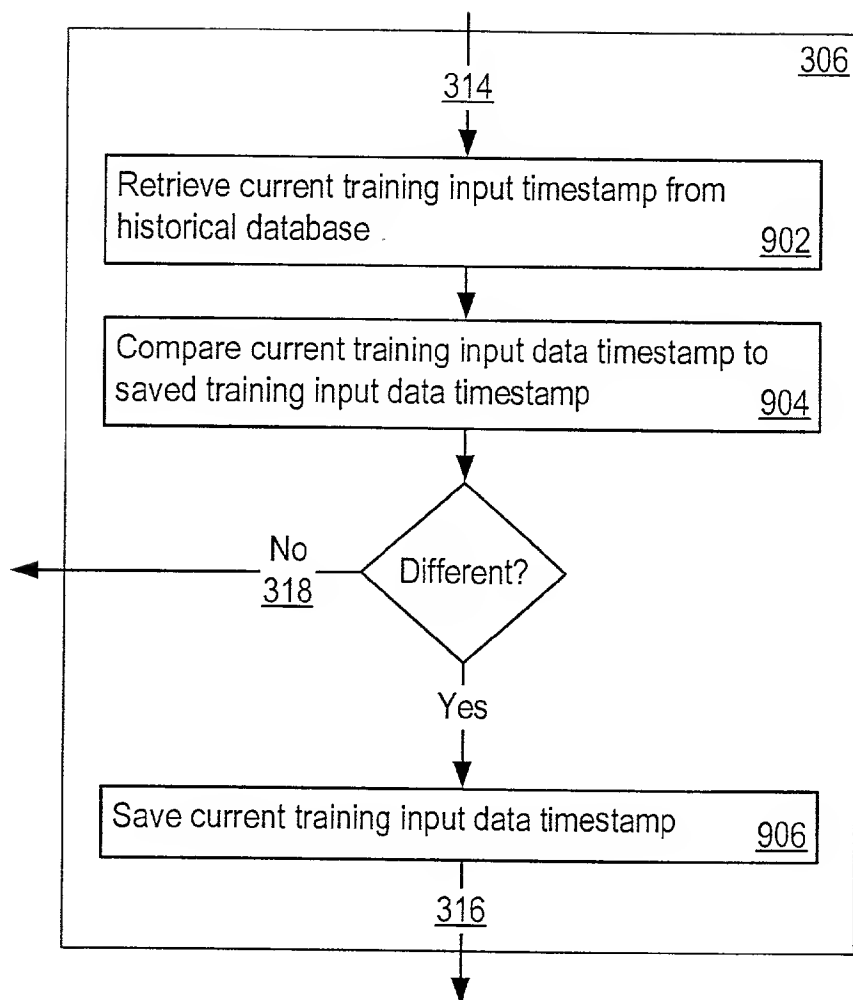


FIG. 13

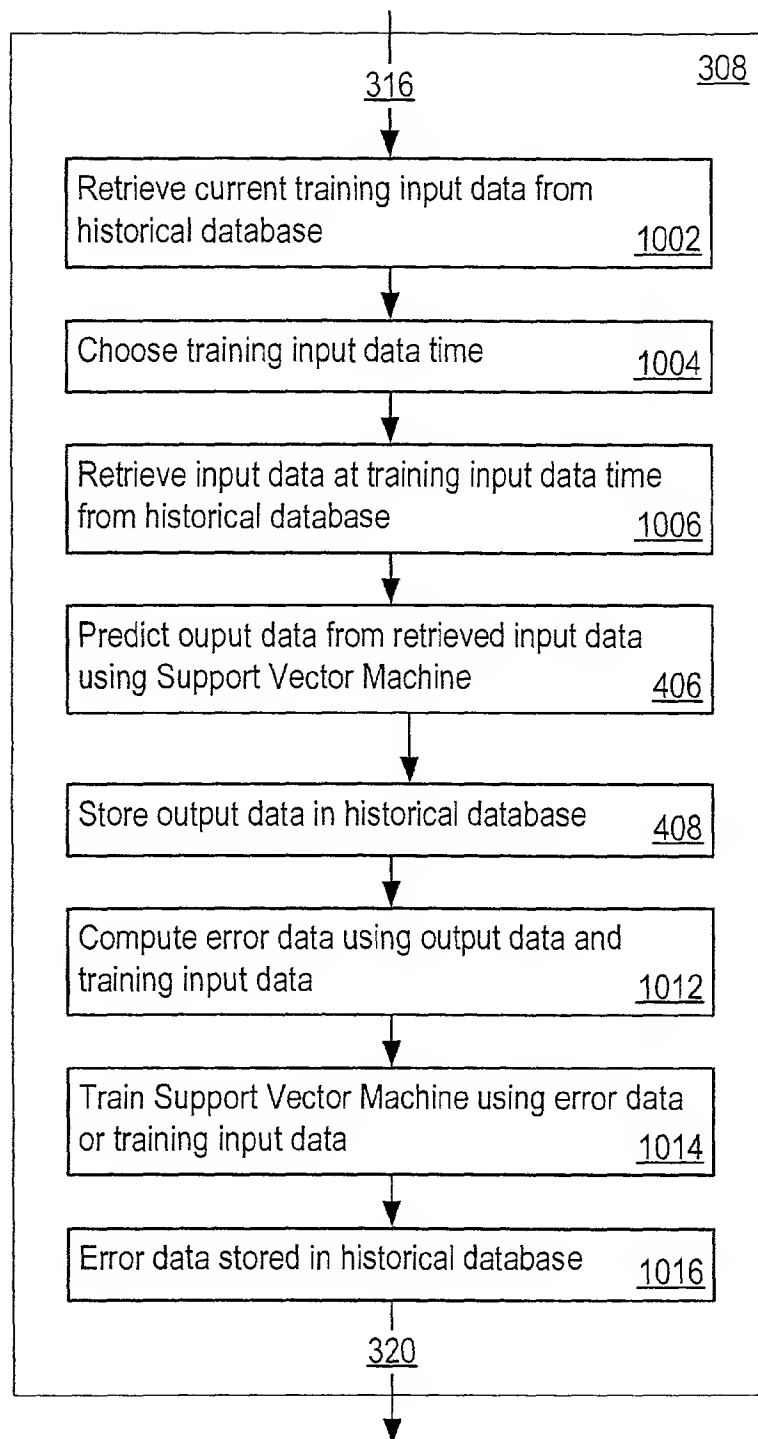


FIG. 14

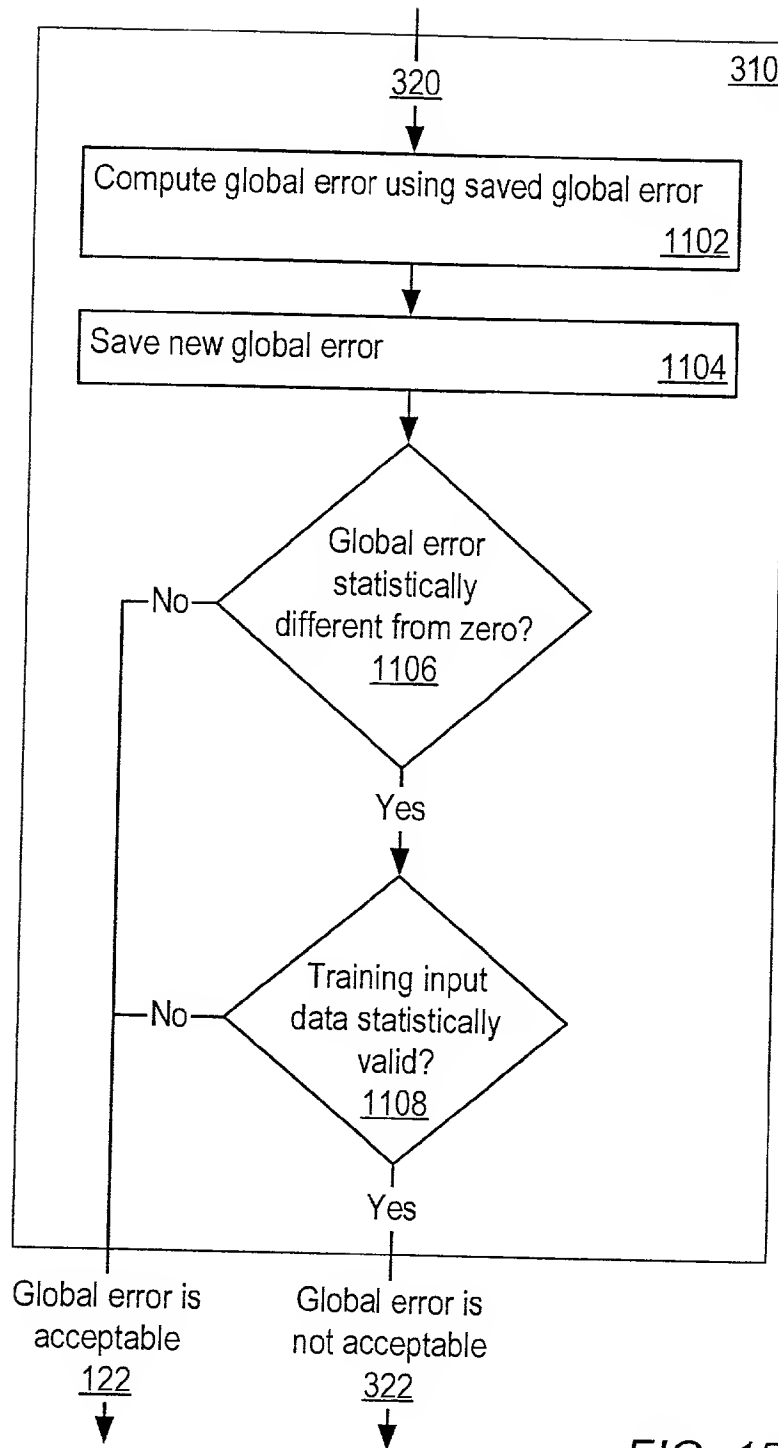


FIG. 15

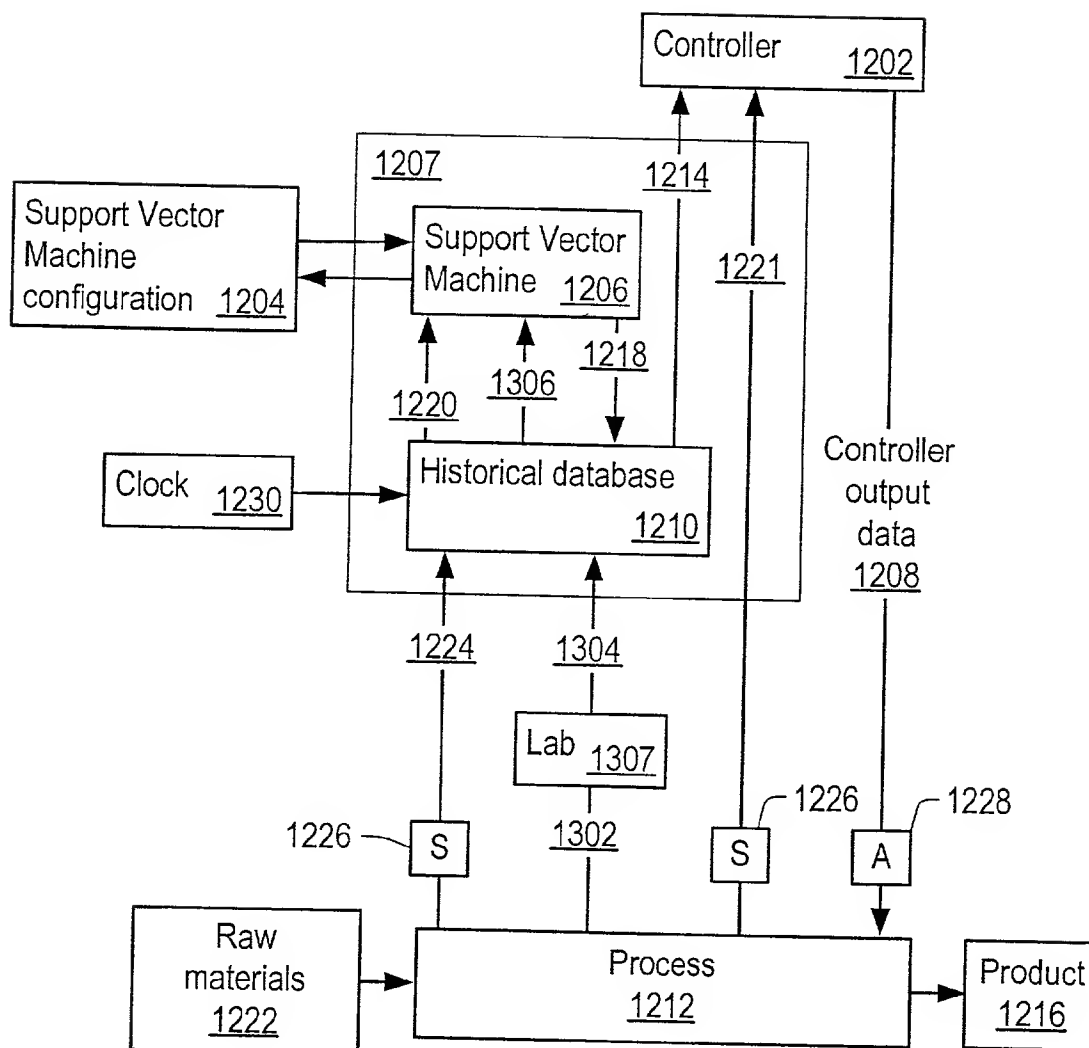


FIG. 16



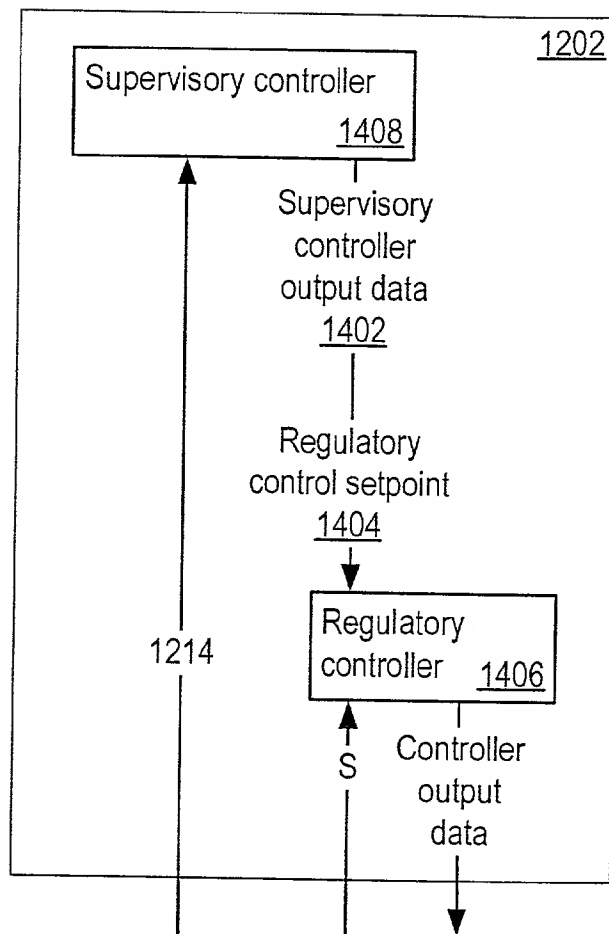


FIG. 17

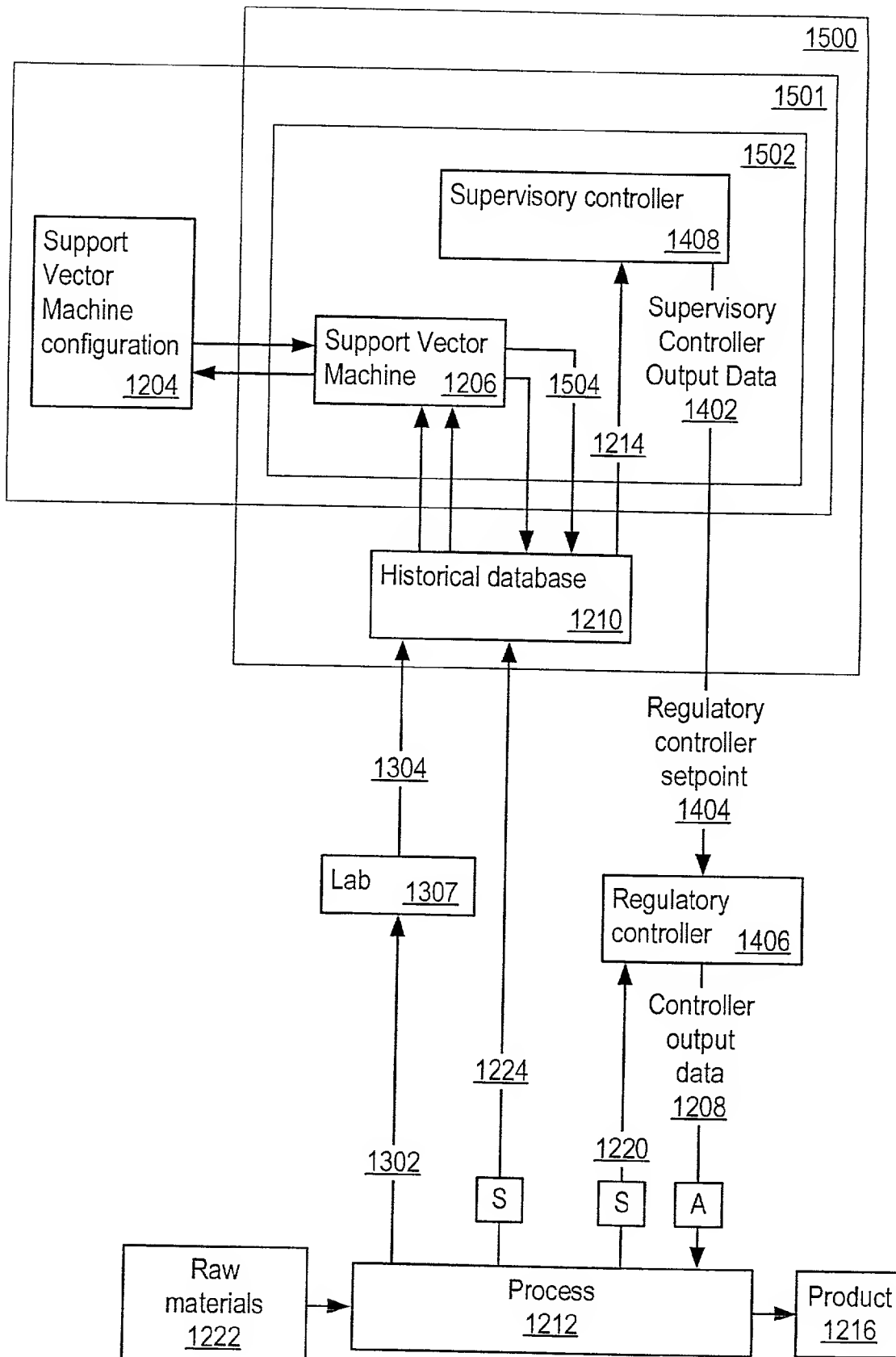


FIG. 18

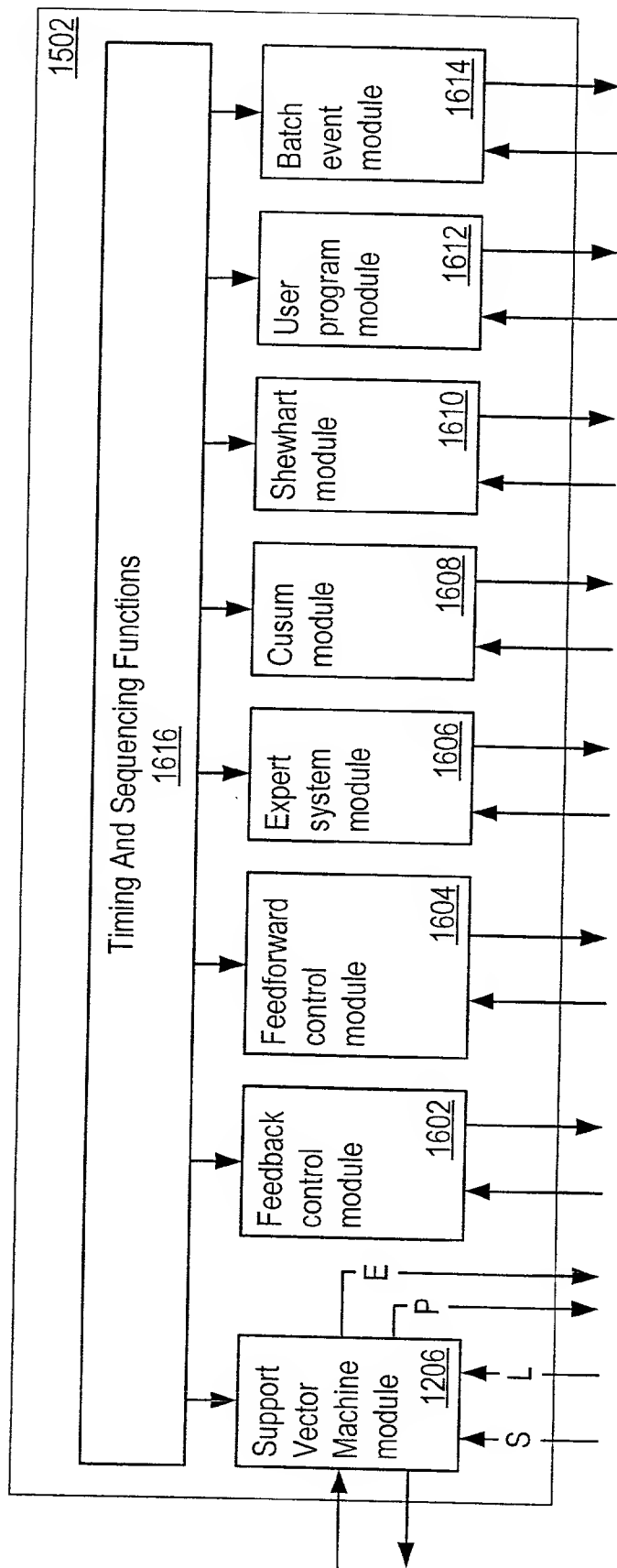


FIG. 19

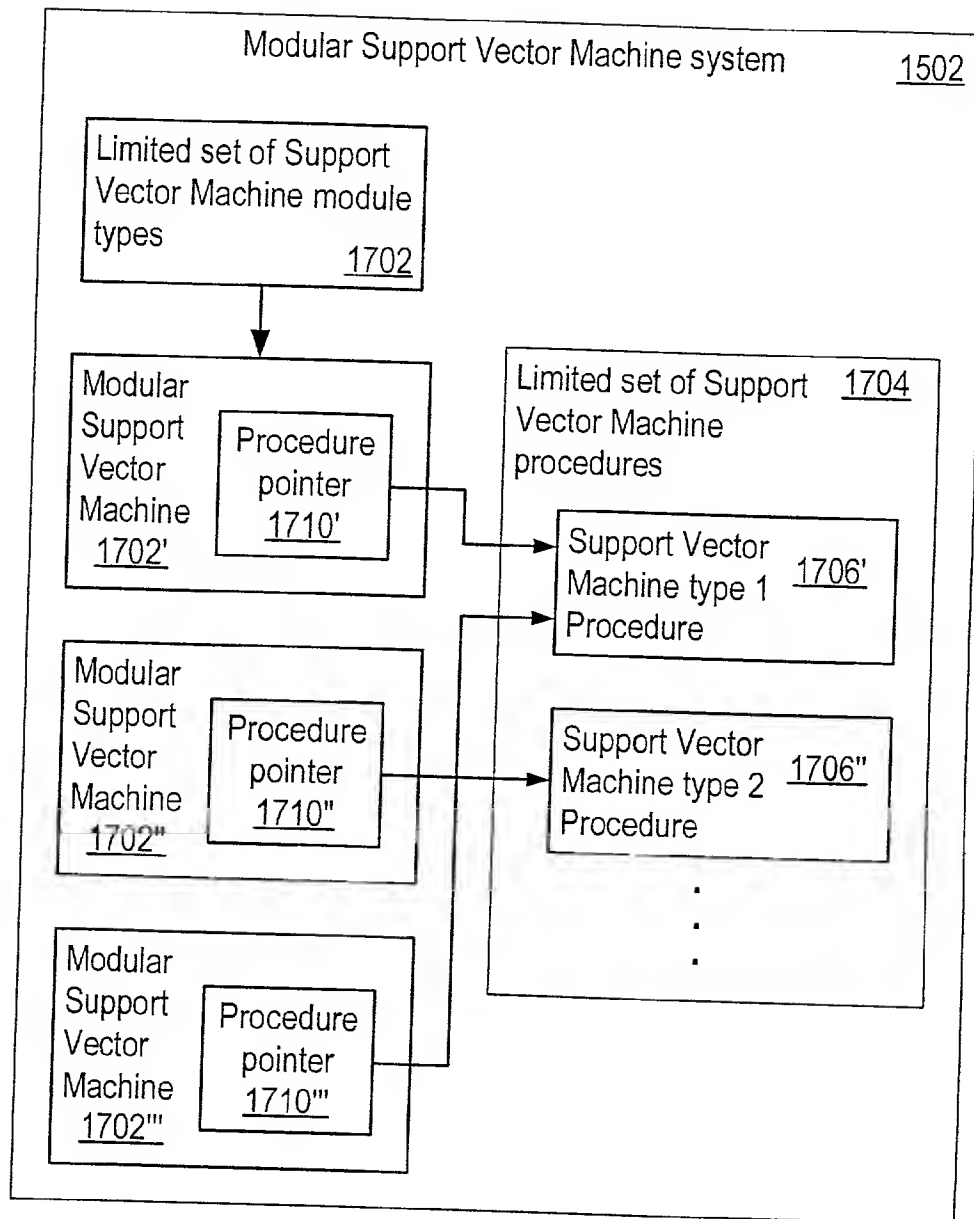


FIG. 20

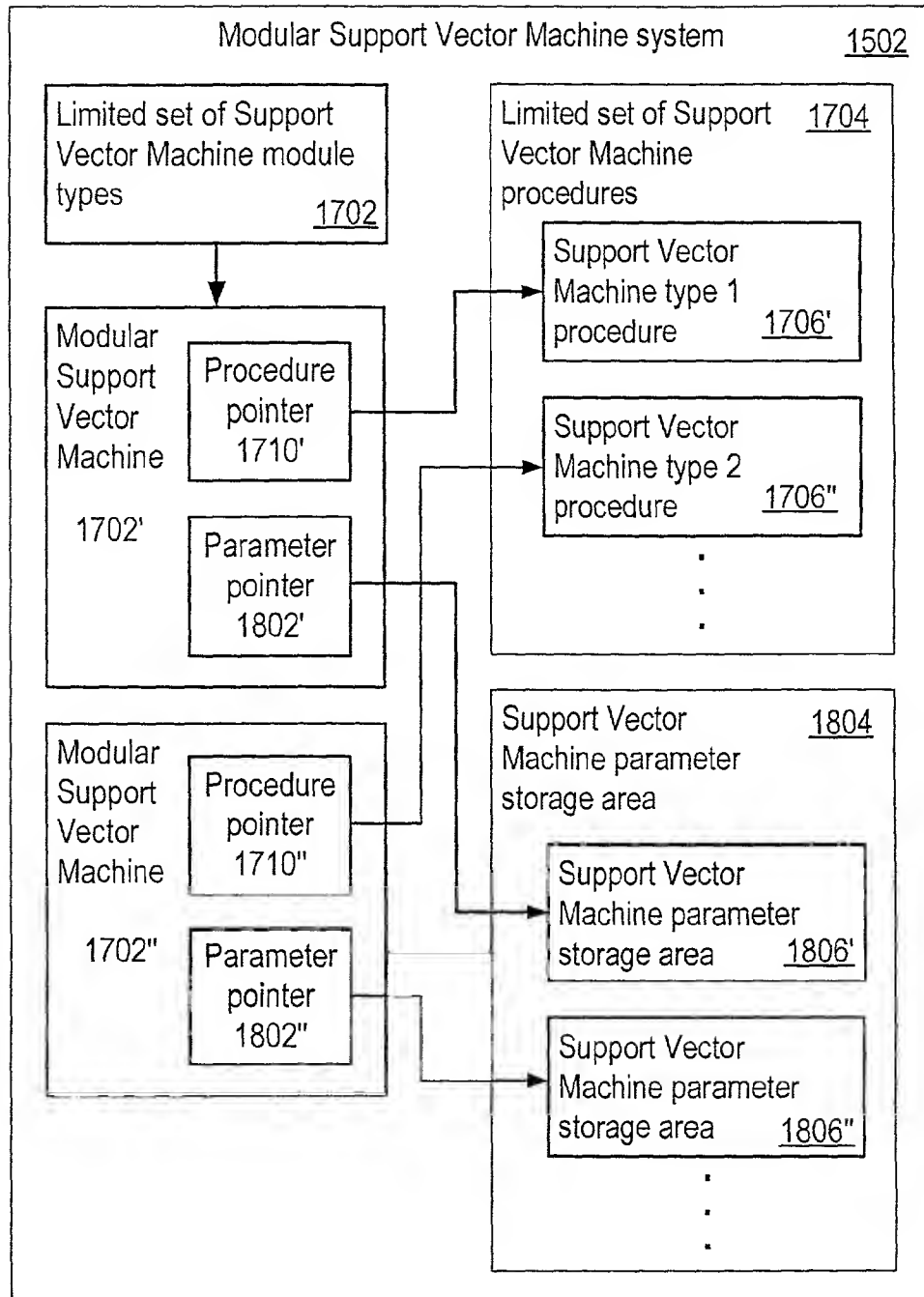


FIG. 21

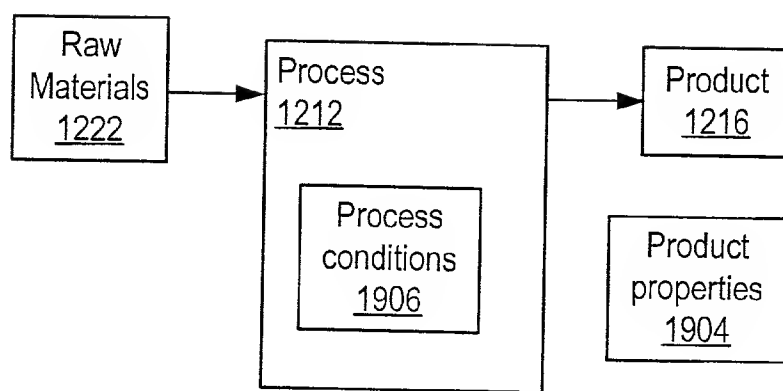


FIG. 22

```

graph TD
    RM[Raw materials 1222] --> P[Process 1212]
    subgraph P_Box [Process 1212]
        PC[Process conditions 1906]
        CPS[Controllable process state 2002]
    end
    P --> P_Box
    PC --> PCM[Process condition measurement 1224]
    PCM --> APCSA[Adjustment to process condition setpoint 1402]
    APCSA --> PPA[Product property aim value 2006]
    PPA --> ACS[Adjustment to controllable process state 1208]
    ACS --> CPS
    CPS --> P1[Product 1216]
    P1 --> PP[Product properties 1904]
    PP --> PPM[Product property measurement 1304]
    PPM --> APCSA
    APCSA --> PCS[Process condition setpoint or aim value 1404]
    PCS --> ISPCS[Initial setting of process condition setpoint 2008]
    ISPCS --> PCS

```

FIG. 23

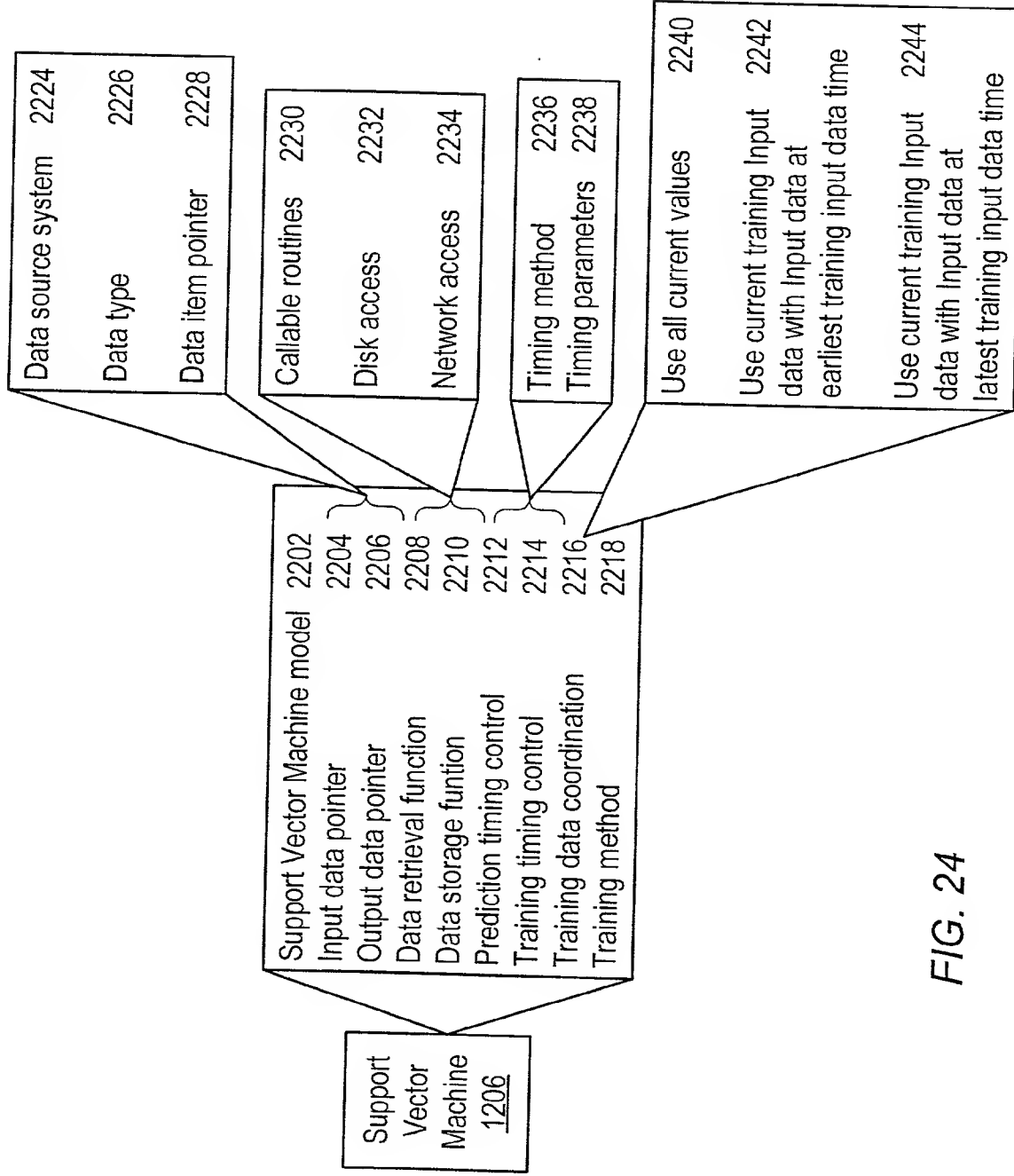


FIG. 24



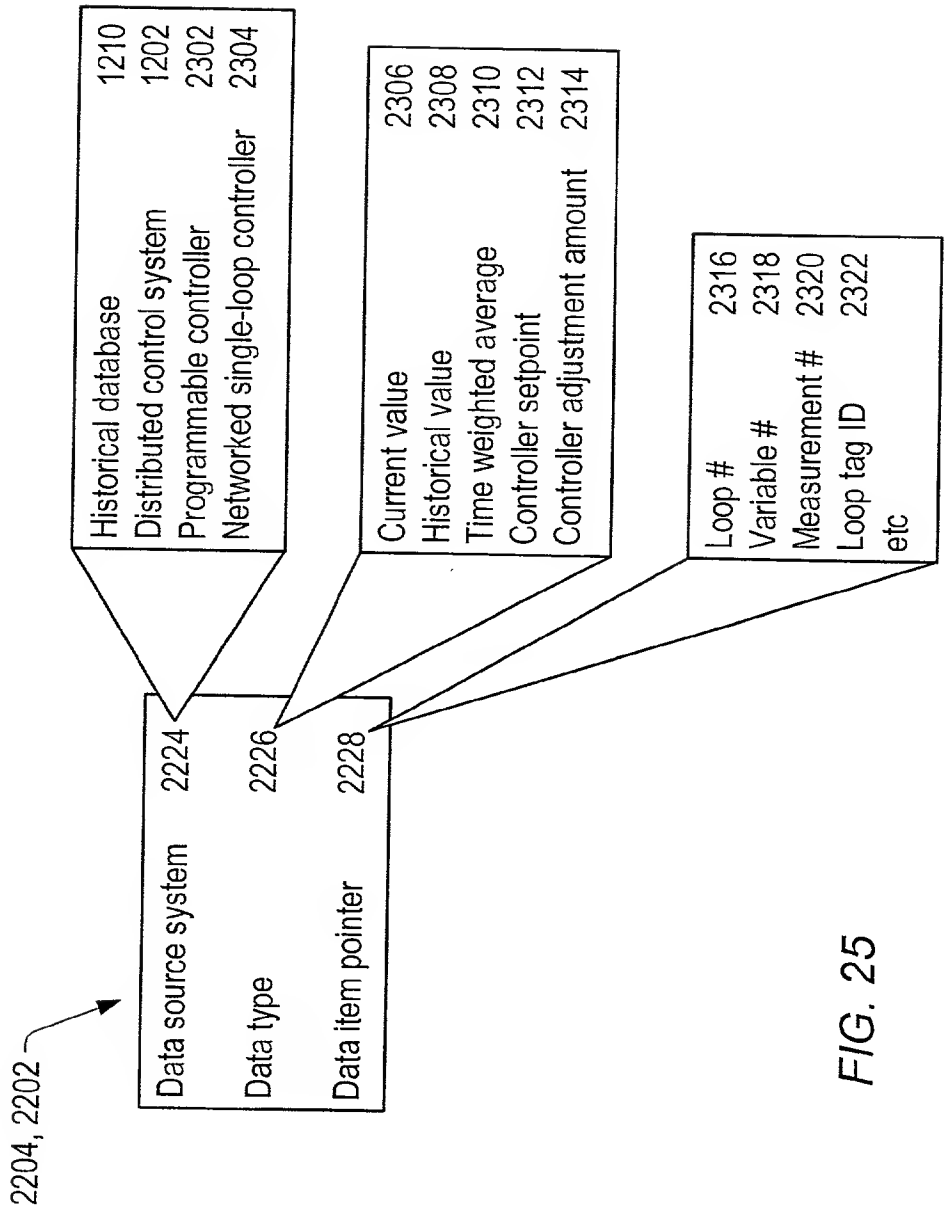


FIG. 25

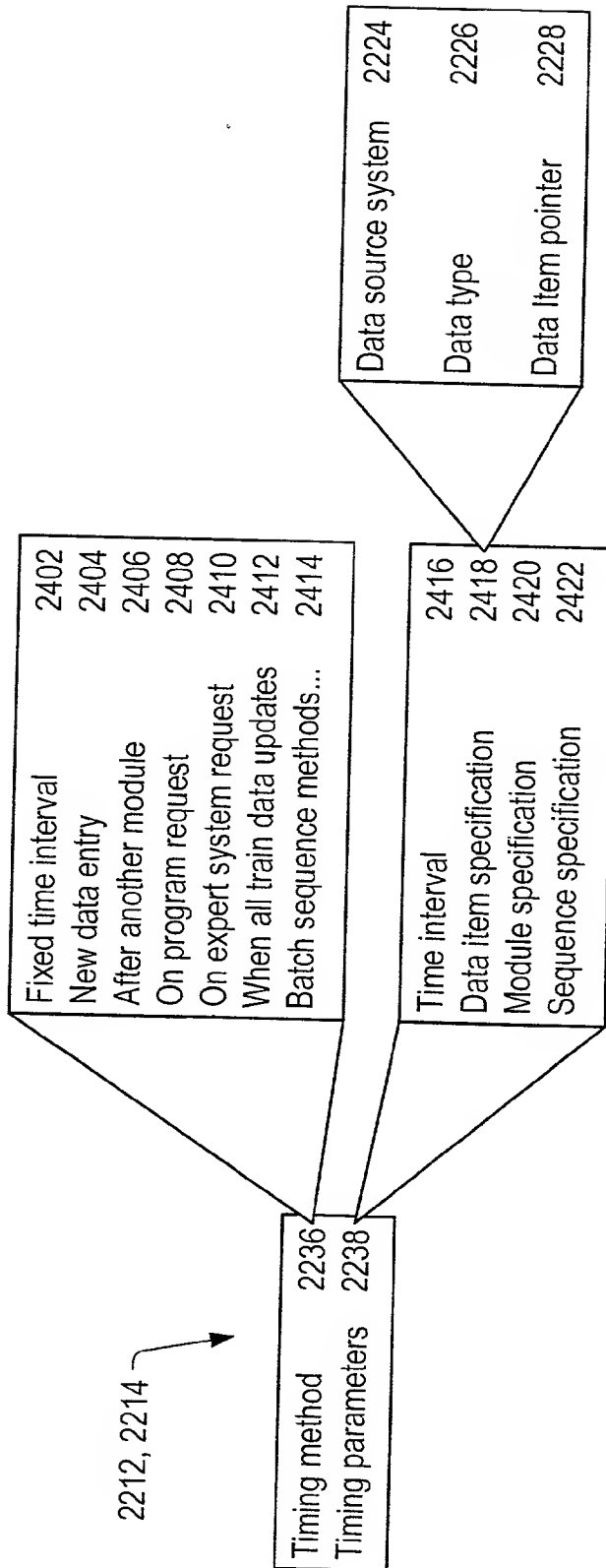


FIG. 26

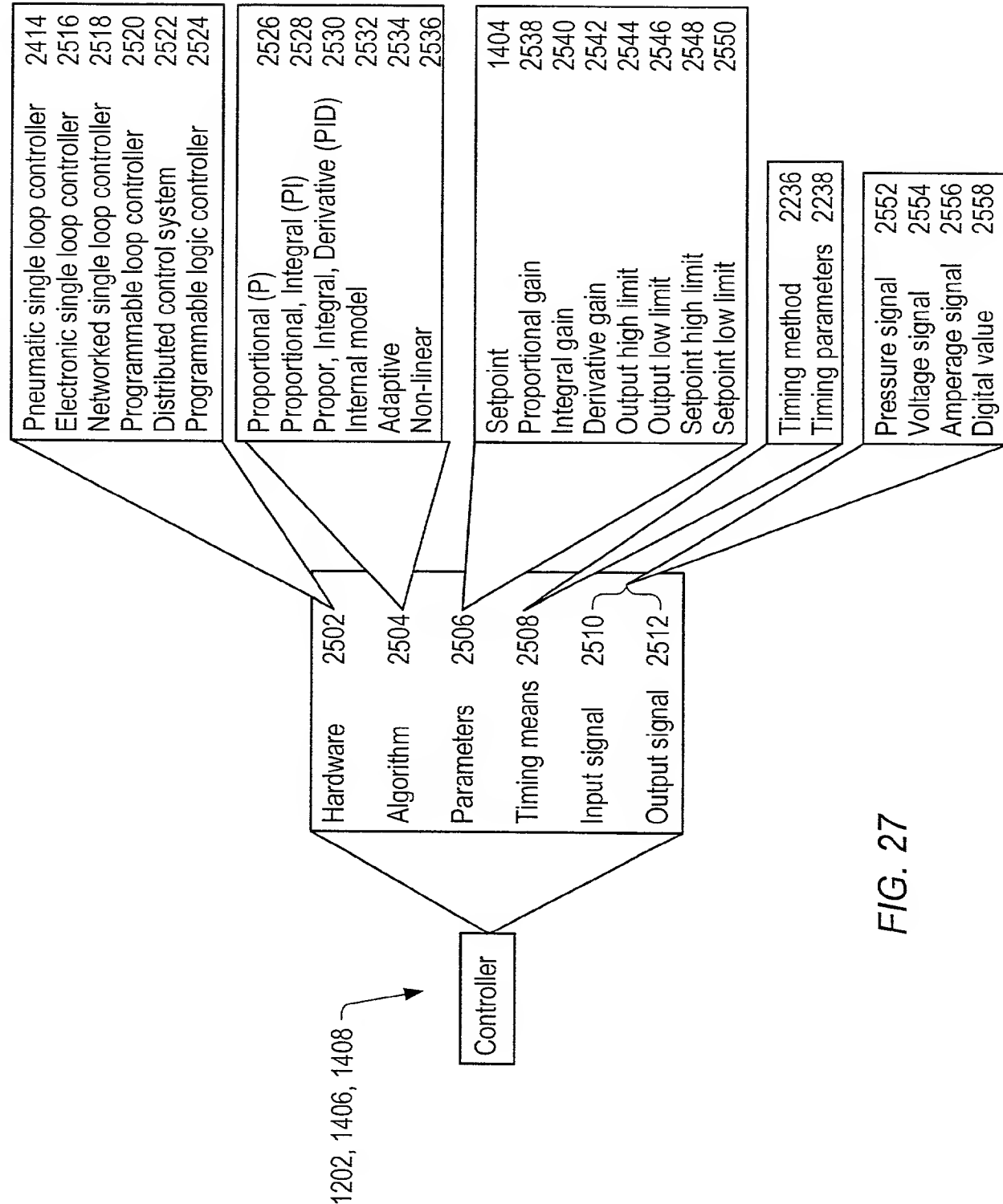


FIG. 27

2602 — BLOCK NUMBER: 179

2604 — Text

BLOCK TYPE: SUPPORT VECTOR MACHINE

BLOCK DESCRIPTION: CONTROL APPLICATION NAME: APPLICATION NAME

BLOCK OWNER: USER NAME

EXTERNAL SWITCH TYPE STATUS PACE BLOCK # 11 DMT CL BTMS ACID

2600

2618

2620

TIME INTRVL — KEY BLOCK

0 01:00:0

2

2606

MODE

X TRAIN

X RUN

X WHEN TRAINING

X WHEN RUNNING

STORE PREDICTED OUTPUTS

5 INPUTS

2 OUTPUTS

SUPPORT VECTOR MACHINE SIZE

3 KERNEL FUNCTION

2622

2608

X

COORDINATE INPUT DATA TIMES WITH TRAINING DATA TIMES WHEN TRAINING.

2610

— TRAINING CONSTANT: .500000

2612

— LOG FILE: LOG FILE NAME

2614

— BLOCK STATUS: INACTIVE

KEYPAD 4  
RANDOMIZE  
COEFFICIENTS  
2616

KEYPAD 7  
TOGGLE ON/OFF

KEYPAD 8  
DATA SPEC PAGE  
2624

KEYPAD 9  
TOP OF FORM

KEYPAD --  
PREV PAGE

FIG. 28

—SUPPORT VECTOR MACHINE INPUTS (SCROLLABLE)—				2700
# 1 DMT VANTAGE	TIME WT AVERAGE	VAR #	1105 XYLENE COL FEED MPPH	2702
OLDEST TIME	0 01:00:00	NEWEST TIME	0 00:10:00	
HIGH LIMIT	150.0	LOW LIMIT:	50.	
		MAX CHANGE	25.0	
—SUPPORT VECTOR MACHINE TRAINING INPUTS (SCROLLABLE)—				2704
# 1 DMT VANTAGE	CURRENT VALUE	VAR #	2081 XYL COL BTMS MFB PPM	
HIGH LIMIT	2500.0	LOW LIMIT:	1500.0	
		MAX CHANGE	250.0	
—SUPPORT VECTOR MACHINE OUTPUTS (SCROLLABLE)—				2706
# 1 DMT VANTAGE	CUR VALUE UNCOMPRSD	VAR #	9055 NN PRED XYL BTM MFB PPM	
HIGH LIMIT	2500.0	LOW LIMIT:	1000.0	
		MAX CHANGE	250.0	
—SUMMED ERROR OUTPUT (NOT SCROLLABLE)—				2708
DMT VANTAGE	CUR VALUE UNCOMPRSD	VAR #	9056 NN XYL COL MODEL ERROR	
HIGH LIMIT	1.0	LOW LIMIT:	0.00	
		MAX CHANGE	1.0	

FIG. 29

SUPPORT VECTOR MACHINE INPUTS (SCROLLABLE)

# 1

DMT PACE

TIME WT AVERAGE

VAR # 1105 XYLENE COL FEED MPPH

OLDEST TIME

0 01:00:00

NEWEST TIME

0 00:10:00

HIGH LIMIT

150.0

LOW LIMIT:

50.

MAX CHANGE

25.0

V

SUPPORT VECTOR MACHINE TRAINING INPUTS (SCROLLABLE)

# 1

DMT VANTAGE

CURRENT VALUE

VAR # 2081 XYL COL BTMS MFB PPM

USE ARROW KEYS AND RETURN  
TO SELECT ONE CHOICE

DMT PACE

DMT VANTAGE

TPA PLANT PCS

DMT PLANT PCS

CRYSTAR VANTAGE

CRYSTAR TDC

2802

USE KEYPAD 0 TO EXIT

HIGH LIMIT

1.0

LOW LIMIT:

0.0

MAX CHANGE

1.0

FIG. 30

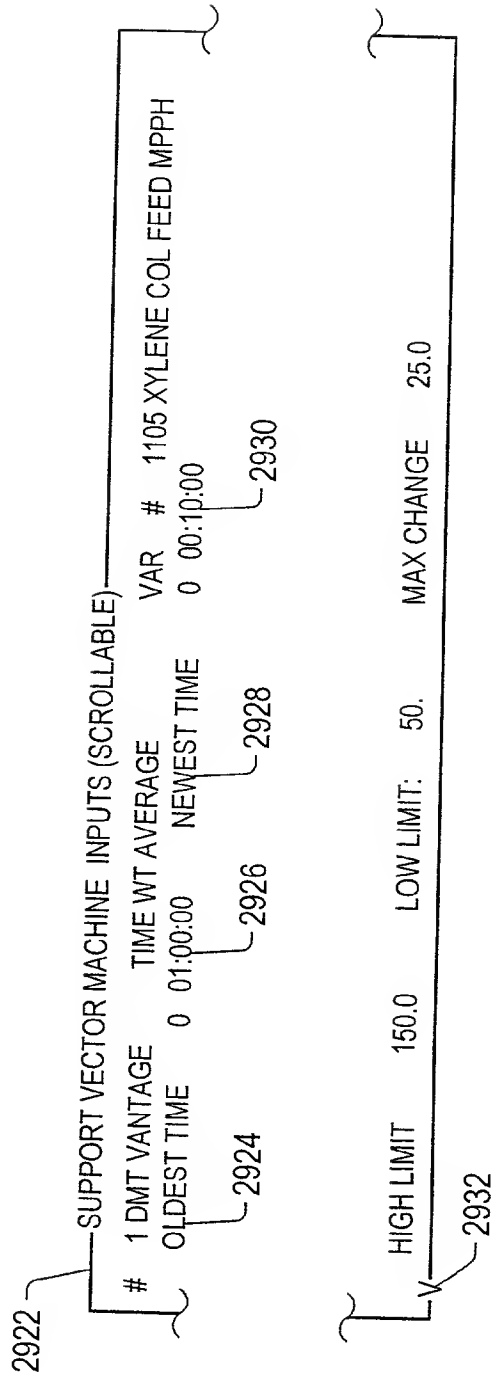
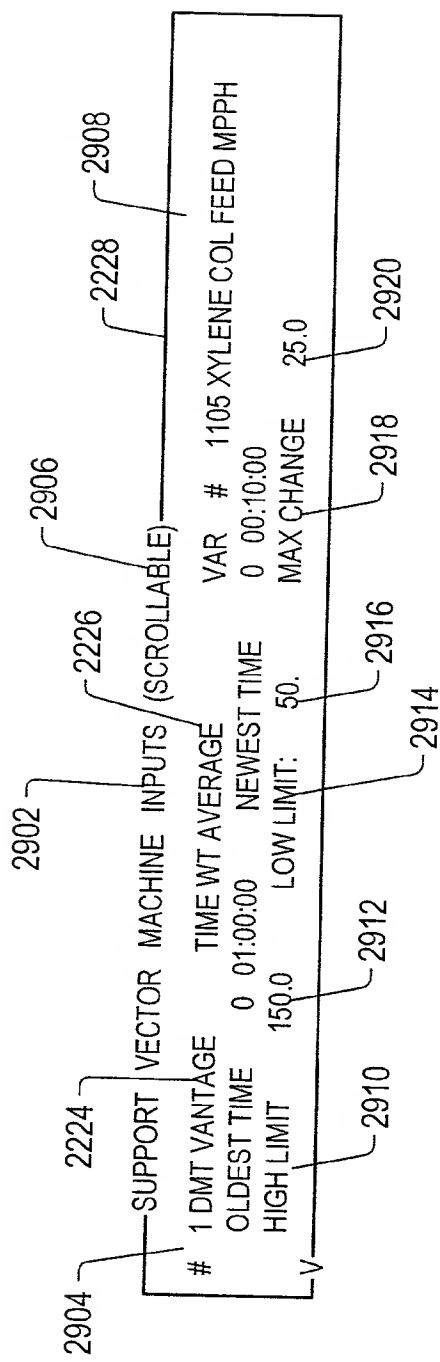


FIG. 31

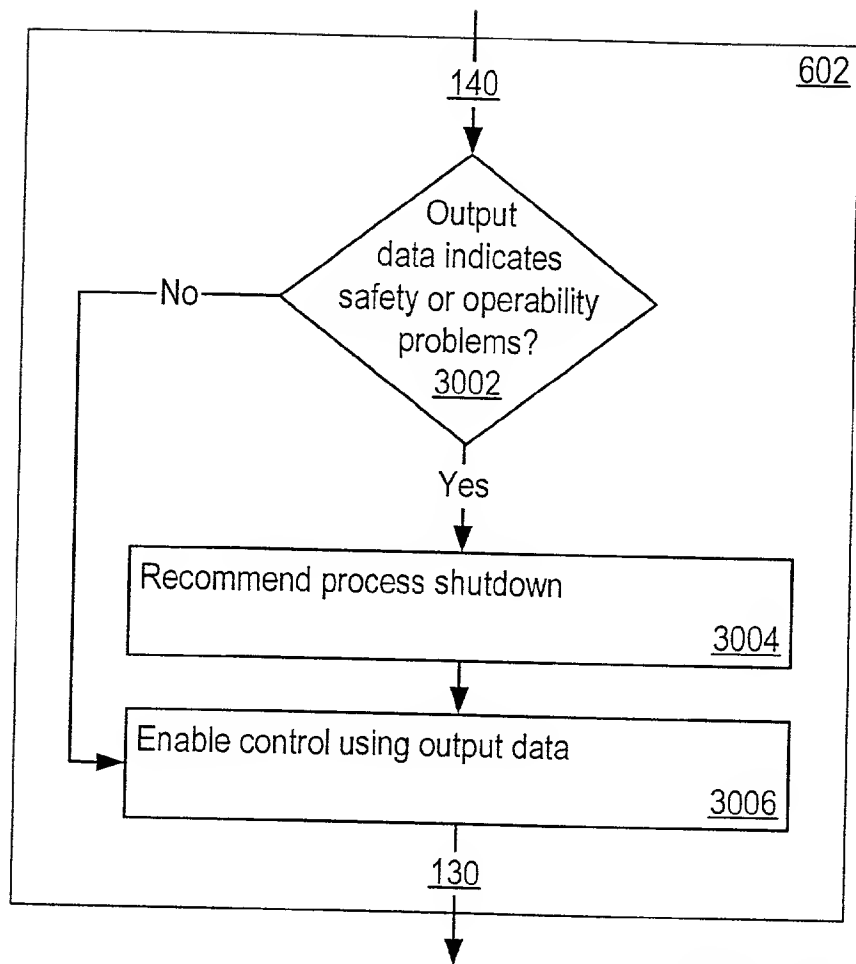


FIG. 32



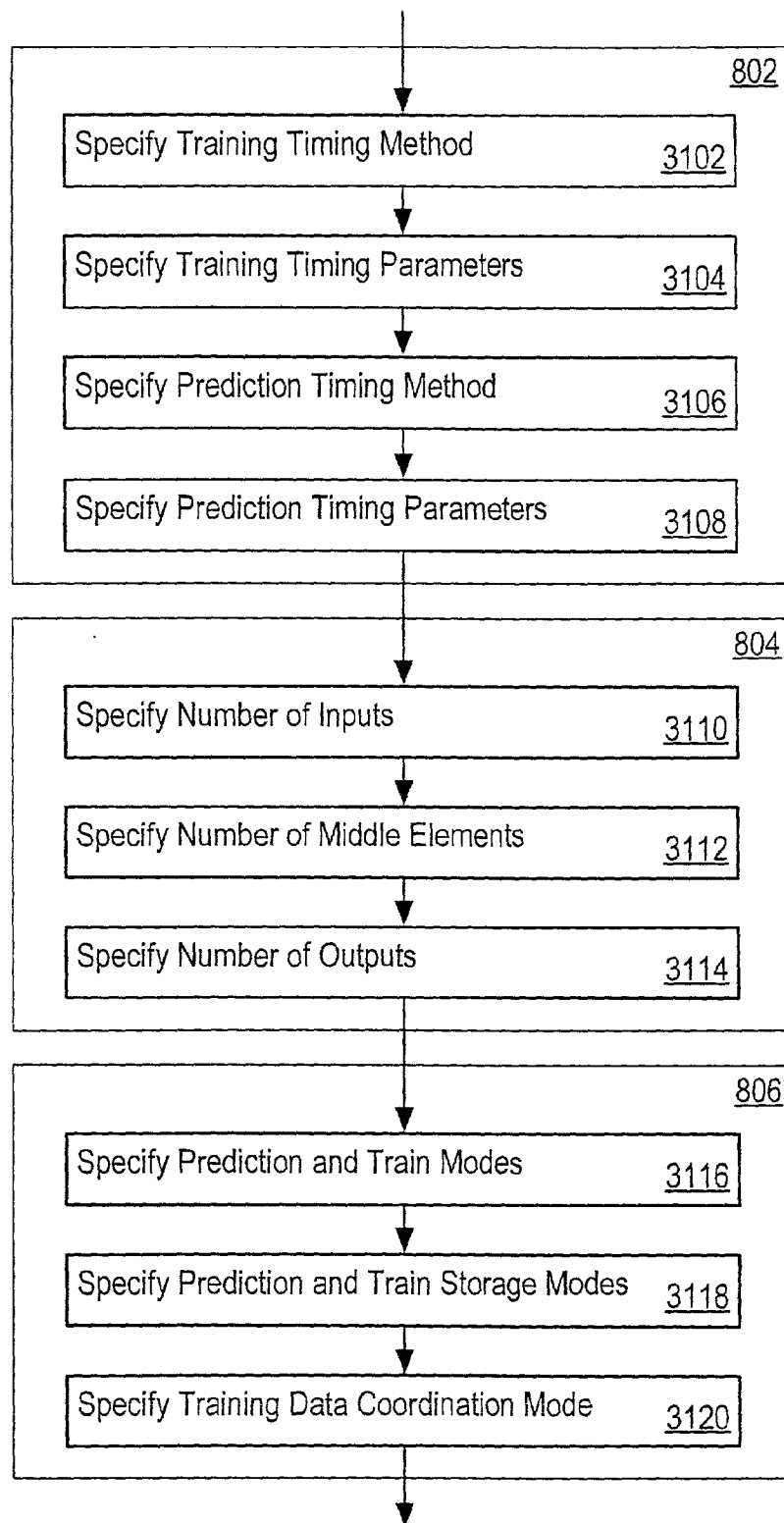


FIG. 33

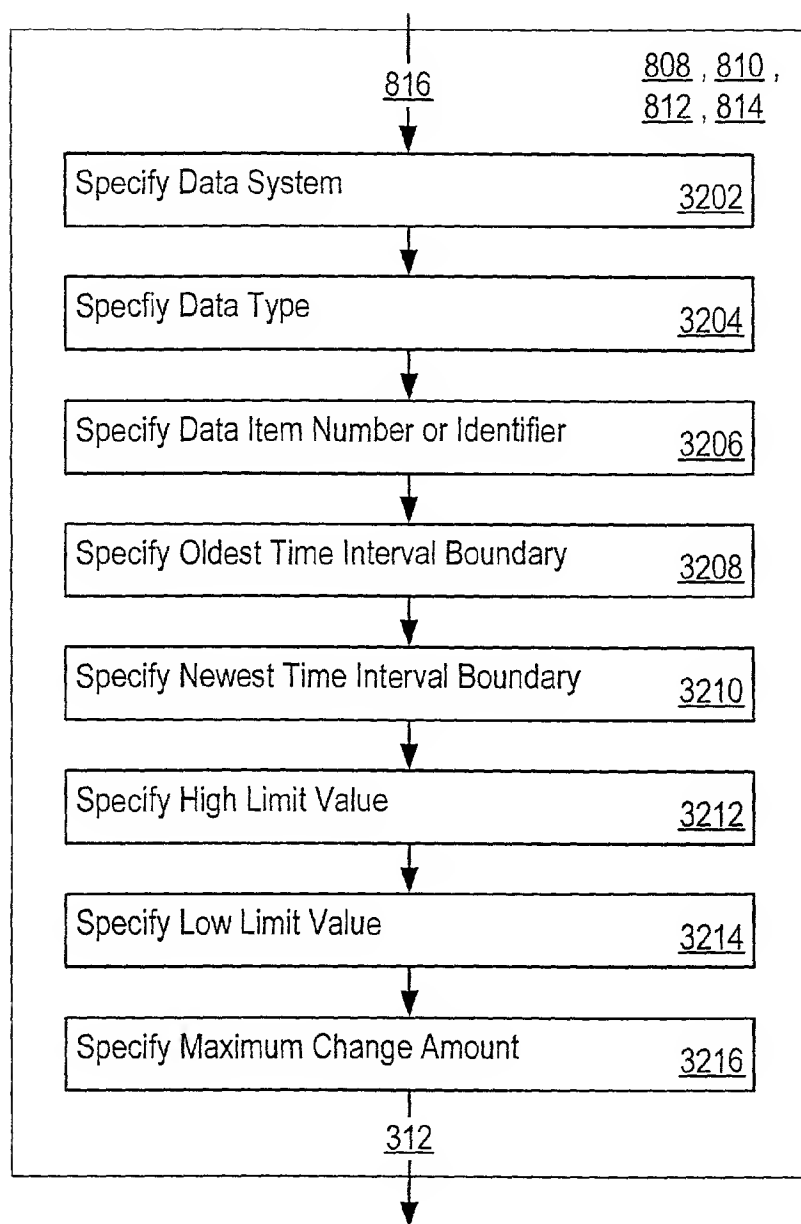


FIG. 34